

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Carrie Thompson Examiner #: 79244 Date: 6/21/05
 Art Unit: 1774 Phone Number 30 571-272 1530 Serial Number: 10/743,820
 Mail Box and Bldg/Room Location: 700 10D28 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Blue electroluminescent polymer + organo-el device

Inventors (please provide full names): Byung-Hee Sohn; Sang Hoon Park; Soo-Hyung Lee; Jhun-Mo Son; Woon-Jung Paek

Earliest Priority Filing Date: 12/24/02

SCIENTIFIC REFERENCE BR

Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate search criteria.

JUN 28 REC'D

Pat. & T.M. Office

Please do a search on claims 1-9.

compounds included

Thanks

STAFF USE ONLY		Type of Search	Vendors and cost where applicable
Searcher: <u>Ed</u>		NA Sequence (#)	STN
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Date Completed: <u>7-12-05</u>		Litigation	Lexis/Nexis
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FILE 'LREGISTRY' ENTERED AT 12:24:54 ON 12 JUL 2005

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L3 O S L1 FUL

FILE 'REGISTRY' ENTERED AT 12:28:46 ON 12 JUL 2005

L4 6 S L1
L5 150 S 7003.3.2/RID
L6 1 S L5 AND PMS/CI

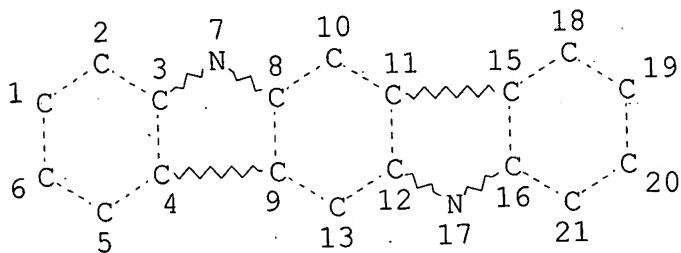
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L7 ANSWER 1 OF 1 ZCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:570450 ZCAPLUS
 DN 141:131396
 ED Entered STN: 16 Jul 2004
 TI Blue electroluminescent polymer and organo-electroluminescent device employing the same
 IN Sohn, Byung-Hee; Park, Sang-Hoon; Lee, Soo-Hyoung; Song, In-Sung; Son, Jhun-Mo; Paek, Woon-Jung
 PA S. Korea
 SO U.S. Pat. Appl. Publ., 19 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM H05B033-12
 ICS C08G061-12
 INCL 428690000; 428917000; 313504000; 313506000; 257040000; 257103000; 528423000
 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38

FAN.CNT 1		KIND	DATE	APPLICATION NO.	DATE
PATENT NO.					
PI	US 2004137271	A1	20040715	US 2003-743820	200312 24
	JP 2004204234	A2	20040722	JP 2003-427007	200312 24

PRAI KR 2002-83186 A 20021224

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
US 2004137271	ICM H05B033-12 ICS C08G061-12		

INCL 428690000; 428917000; 313504000; 313506000;
 257040000; 257103000; 528423000
 US 2004137271 NCL 428/690.000; 428/917.000; 313/504.000;
 313/506.000; 257/040.000; 257/103.000;
 528/423.000
 ECLA C08G061/12D1B; C08G073/06H1
 JP 2004204234 FTERM 3K007/AB03; 3K007/AB04; 3K007/DB03; 3K007/FA01;
 4J032/BA02; 4J032/BA12; 4J032/BA15; 4J032/BA20;
 4J032/BB04; 4J032/BB05; 4J032/BB09; 4J032/CA12;
 4J032/CA28; 4J032/CB04; 4J032/CB12; 4J032/CB13;
 4J032/CG03

AB The present invention relates to a blue electroluminescent polymer having an indolocarbazole unit in the backbone of a polyarylene polymer and an organo-electroluminescent device using the same. Thus, 880 mg bis(1,5-cyclooctadiene)nickel and 500 mg bipyridine were mixed, 346 mg 1,5-cyclooctadiene was added therein and stirred at 80.degree. for 30 min, 102 mg an indolecarbazole monomer (prepn. given) and 790 mg 2,7-dibromo-9,9-dioctylfluorene (prepn. given) were added therein and polymd. to give a copolymer with yield 75%, wt. av. mol. wt. 140,000, and polydispersity 2.71, which was fabricated into a org. electroluminescent device with good max. efficiency and color purity.

ST blue electroluminescent polymer organo device;
 dibromodioctylfluorene indolecarbazole copolymer prepns

IT Luminescent substances
 (electroluminescent; prepns. of blue electroluminescent polymers for organo-electroluminescent devices)

IT Electroluminescent devices
 (prepns. of blue electroluminescent polymers for organo-electroluminescent devices)

IT 6336-32-9P 721945-34-2P
 (intermediate in monomer prepns.; prepns. of blue electroluminescent polymers for organo-electroluminescent devices)

IT 198964-46-4P, 2,7-Dibromo-9,9-dioctylfluorene 721945-35-3P
 (monomer; prepns. of blue electroluminescent polymers for organo-electroluminescent devices)

IT **721945-36-4P**
 (prepns. of blue electroluminescent polymers for organo-electroluminescent devices)

IT 128-08-5, NBS
 (prepns. of blue electroluminescent polymers for organo-electroluminescent devices)

IT 100-63-0, Phenylhydrazine 637-88-7, Cyclohexane-1,4-dione
 16433-88-8, 2,7-Dibromofluorene 26746-34-9, Bromooctane
 (reactant in monomer prepns.; prepns. of blue electroluminescent polymers for organo-electroluminescent devices)

IT **721945-36-4P**

(prep. of blue electroluminescent polymers for
organo-electroluminescent devices)

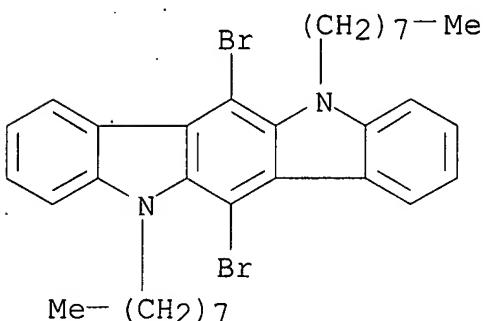
RN 721945-36-4 ZCAPLUS

CN Indolo[3,2-b]carbazole, 6,12-dibromo-5,11-dihydro-5,11-dioctyl-,
polymer with 2,7-dibromo-9,9-dioctyl-9H-fluorene (9CI) (CA INDEX
NAME)

CM 1

CRN 721945-35-3

CMF C34 H42 Br2 N2



CM 2

CRN 198964-46-4

CMF C29 H40 Br2

